

Commentary

Teething as a Cause of Death A Historical Review

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Christchurch, New Zealand, May 4, 1876:

I suppose before now Georgie and Hannah are both walking and hope they are well. You will have to take care of them this next summer and fall *until they get their teeth all cut*. Kiss them all for me until I can return and attend to it myself [emphasis by authors].*

This excerpt is from a letter written to his family by William McLachlan, an early Utah polygamist settler who was then serving as a missionary in New Zealand for the LDS (Mormon) Church. His concern for his two children, ages 14 and 15 months, and their teething status is better understood when we learn that he had already lost a child a few years earlier; the reported cause of death was teething. This unusual diagnosis was listed frequently in early Utah death records.

In the attempt to relate historical diseases with more modern diagnoses, teething as a cause of death has eluded precise

linkage. Current medical observations suggest little more than restlessness, drooling, finger sucking, and appetite loss as results of this condition.¹ Previously, however, teething was viewed with great apprehension, as described in a 1975 British article in which Hippocrates is quoted: "Teething children suffer from itching of the gums, fever, convulsions, diarrhoea,"^{2(p604)} and Arbuthnot, who wrote in 1732, "Above one-tenth part of all children die in teething (some of them from gangrene)."^{2(p1061)} A more contemporary review of questionable diagnoses revealed "teething convulsions" as the reported cause of death in a small group of English children between 1947 and 1979.³ A 1905 American home health care book contains a description of teething and recommended treatment:

A very common cause of diseases of the stomach and bowels, and also of convulsions in children, is to be found in the hardening or induration of the gums at the time of teething, and this blunder of nature's ought to be promptly remedied whenever the gums in infants at the time of the first dentition are found to be red, swollen, and hot to the touch, by the use of the lancet.^{4(p467)}

*Quotations and information from the letters and journal of William McLachlan were kindly provided by Winifred McLachlan, PHN; the initial data were extracted by David Proctor.

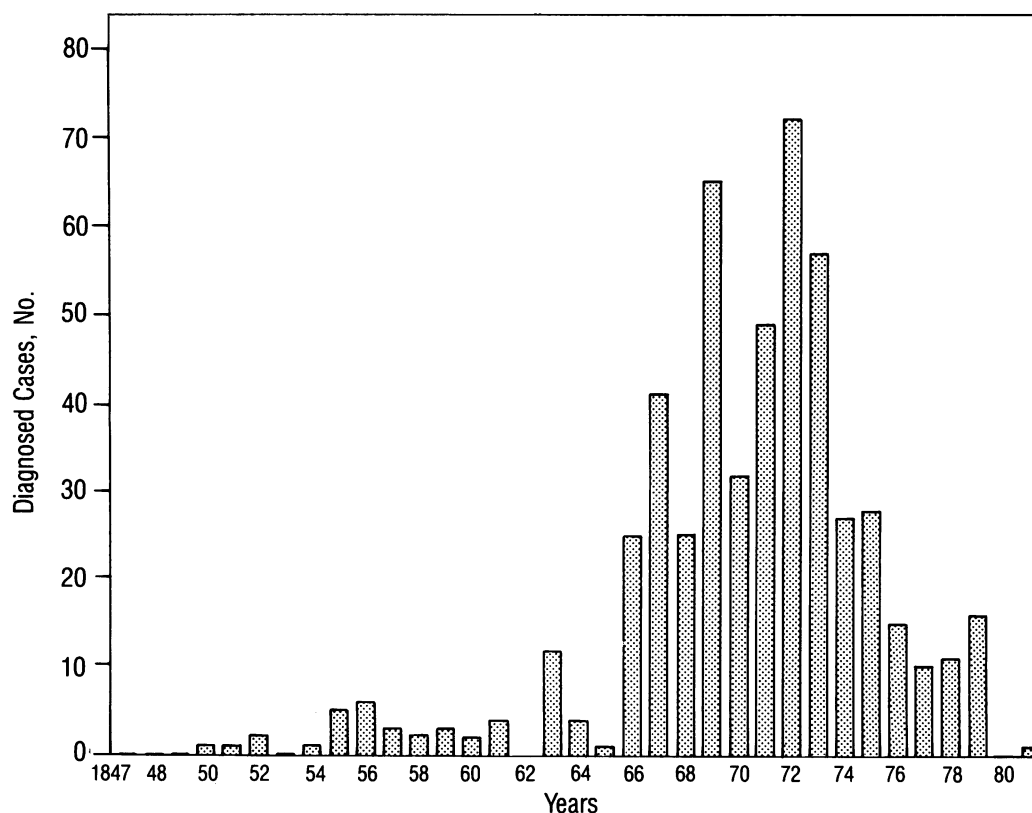


Figure 1.—The graph shows the number of diagnosed cases of "teething" as the cause of death in 19th-century Utah pioneer records.

(Gibbons HL, Hebdon CK: Teething as a cause of death—A historical review. *West J Med* 1991 Dec; 155:658-659)

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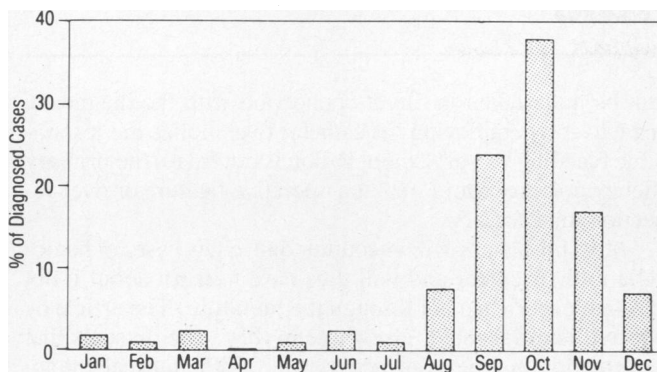


Figure 2.—The graph shows the percentage of teething deaths in the month of occurrence. These figures are taken from Utah pioneer records.

Indeed, significant symptoms associated with teething have a prominent place in the beliefs of many primitive and more advanced cultures.⁵ Contemporary American pediatric practitioners are not immune to such beliefs, as noted in a study in which a considerable number of questioned physicians thought teething was related to many systemic symptoms.⁶

Teething Deaths in the Great Salt Lake Valley

Early Utah pioneer records that begin in 1848 list teething as a relatively common cause of death. In the period 1847 to 1881, a total of 521 deaths were attributed to teething or related conditions. Simple analysis of these data reveals two unexpected and unexplained temporal patterns.

The number of cases listing teething as a cause of death increased gradually each year until 1866, when a precipitous jump occurred. The level remained relatively high for several more years. Almost as quickly, the number of "teething deaths" fell (Figure 1) and virtually disappeared. Had a new physician or midwife with a penchant for this diagnosis entered practice, the mystery would be solved. A review of available information on practitioners does not support such a suggestion. Figure 2 shows a second pattern as it plots the number of deaths against the month of occurrence. The vast majority of cases occurred in August through December.

A search of the literature, conversations with historians and pediatricians, and a review of other early records have failed to provide any leads in determining the actual cause(s) of death.

Some have suggested that the actual cause of death was most likely the sudden infant death syndrome (SIDS).³ In this

English study, necropsy reports and death certificates in Sheffield from the period 1947 to 1979 were reviewed. Cases reported to have been due to "convulsions" or "teething convulsions" were dismissed as "cot deaths." Evaluation of Salt Lake City archival data shows the average age for "teething deaths" was 13 months. Most studies have found, however, that SIDS usually occurs before the age of 6 months.⁷ This, along with the strong seasonal component noted previously, would not support the teething-SIDS comparison.

Around the time the teething diagnosis was made less frequently, a new cause-of-death entry was increasingly used: "cholera infantum." As with teething, the exact definition of cholera infantum is subject to speculation, although the physiologic mechanism of death is more apparent. The average ages of death were similar, but the peak occurred in August, two months before the October peak of teething deaths. The peak for SIDS deaths in Utah occurs in January but with a number of cases throughout the year, unlike the pattern with teething deaths or cholera infantum.

Conclusion

Teething is a commonly listed cause of death for children in early Utah records. Attempts to equate the diagnosis, with its historical and seasonal variations, to our current understanding of causes of death, including SIDS, have not been successful.

The unraveling of such medical mysteries as this can occasionally provide clues to current problems. More commonly, such endeavors provide an understanding of our medical heritage and fill in a rapidly dimming historical picture that will all too soon be lost to us. We invite comment, conjecture, and facts regarding teething as a possible cause of death.

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